

## ABSTRACT

Details of a highly cost effective and efficient implementation of a manifold array (ManArray) architecture and instruction syntax for use therewith are described herein. Various aspects of this approach include the regularity of the syntax, the relative ease with which the instruction set can be represented in database form, the ready ability with which tools can be created, the ready generation of self-checking codes and parameterized testcases. Parameterizations can be fairly easily mapped and system maintenance is significantly simplified.